What is claimed is:

1. Apparatus for representing entitlements for instances of services having entitlement IDs associated therewith in a receiver that receives the instances of services and the entitlement IDs, the apparatus comprising:

a memory having a starting entitlement ID and a map having entitlement values for entitlements that have been given to the receiver, wherein the starting entitlement ID is used with the map and with an entitlement ID associated with a given instance of service to determine whether the receiver is entitled to the given instance of a service, and wherein the receiver grants access to the given instance of service only if the receiver is entitled to the given instance of service.

2. The apparatus of claim 1, wherein the map represents a sequence of entitlement IDs.

3. The apparatus of claim 2, wherein the starting entitlement ID is the first entitlement ID in the sequence of entitlement IDs.

4. The apparatus of claim 3, wherein the sequence of entitlement IDs is a list.

5. The apparatus of claim 3, wherein the sequence of entitlement IDs is contiguous in the memory.

6. The apparatus of claim 5, wherein the map is a bit map representing the presence or absence of entitlements for the receiver for instances of service.

7. The apparatus of claim 3, wherein:

the map is represented by an array of elements having entitlement values that represent the presence or absence of entitlement; and

the difference in the sequence of entitlement IDs between the starting entitlement ID and the entitlement ID associated with the given instance of service is used to determine the index value for a given element in the array, wherein the given element has the entitlement value of the given instance of service.

8. The apparatus of claim 7, wherein:

the array has single-bit elements and the state of an element's bit indicates whether the receiver has the entitlement value represented by the array element.

9. The apparatus of claim 1, wherein:

the memory is accessible only to an access control component of the receiver.

10. The apparatus of claim 9, wherein:

the starting entitlement ID and the map are set in response to a message received in the receiver.

11. The apparatus of claim 1, wherein:

the starting entitlement ID and the map are set in response to a message received in the receiver.

12. The apparatus of claim 11; wherein:

the message contains a message starting entitlement ID and message map from which the starting entitlement ID and the map are set.

13. The apparatus of claim 12, wherein:

the receiver is given entitlements by at least one entitlement agent;

each entitlement agent has a map for representing entitlements that have been given to the receiver;

the message further specifies a given entitlement agent; and

the message starting entitlement ID and the message map are used to set a starting entitlement ID and a map in the list for the given entitlement agent.

14. The apparatus of claim 1, further comprising:

a time value that indicates a time at which the entitlement values are not valid.

15. A method of providing a receiver with entitlements for instances of a service, the method comprising the steps of:

making a representation of entitlements that includes a starting entitlement ID and a map that specifies a set of entitlement values; and

sending a message to the receiver that contains the representation, wherein the receiver responds to the message by storing the representation and using the starting entitlement ID with the map and with an entitlement ID associated with a given instance of service to determine whether the receiver has an entitlement value for the given instance of a service.

16. The apparatus of claim 15, wherein the map represents a sequence of entitlement IDs.

17. The apparatus of claim 16, wherein the starting entitlement ID is the first entitlement ID in the sequence of entitlement IDs.

18. The apparatus of claim 17, wherein the sequence of entitlement IDs is a list.

19. The apparatus of claim 17, wherein the sequence of entitlement IDs is contiguous in the memory.

20. The apparatus of claim 19, wherein the map is a bit map representing the presence or absence of entitlements for the receiver for instances of service.

21. The method of claim 17, wherein:

the map is represented by an array whose elements have entitlement values that represent the presence or absence of entitlement values; and

the difference between the starting entitlement ID and the entitlement ID of the given instance of service is used to determine the index value for an element in the array, wherein the element having the index value represents the entitlement value of the given instance of service.

22. The method of claim 21, wherein:

the array has single-bit elements and the state of an element's bit indicates whether the receiver has the entitlement value represented by the array element.

23. The method of claim 15, wherein:

the receiver is given entitlements by at least one entitlement agent; and the method further includes the steps of:

putting a specification of a given entitlement agent in the message, the receiver using the specification to locate a list whose elements include an apparatus for representing entitlements and using the apparatus in the message to set an apparatus in the list for the given entitlement agent.

24. The method of claim 15, further comprising the steps of:

putting a time value that indicates a time at which the representation is not valid in the message; and

the receiver storing the time value and using the time value to determine whether the representation is valid.

25. The method of claim 15, further comprising the step, in the receiver, of:

determining that the receiver has an entitlement value for the given instance of service;

processing, in a secure element, a long-term key to obtain a short-term key; and

using the short-term key to decrypt the given instance of service.

26. The method of claim 15, wherein the sending step comprises the step of:

sending to the receiver a long-term key within the message.

27. The method of claim 15, wherein the message including the entitlement ID is authenticated by the receiver using information provided by an entitlement agent.

28. The method of claim 15, wherein authentication is performed using RSA digital signatures.

29. A receiver for receiving instances of service and entitlement IDs associated therewith and entitlement values for the entitlement IDs, the receiver comprising:

a port for receiving instances of service and at least a first message having an entitlement ID associated with a given instance of service;

a memory coupled to the port having a starting entitlement ID and a map including entitlement values that have been given to the receiver, wherein the starting entitlement ID is used in conjunction with the map and with an entitlement ID associated with the given instance of service to determine the entitlement of the receiver for the given instance of service, and wherein the receiver grants access to the given instance of service only if the receiver is entitled to the given instance of service.

30. The receiver of claim 29, wherein the map represents a sequence of entitlement IDs.

31. The receiver of claim 30, wherein the sequence of entitlement IDs is a discrete list of entitlement IDs.

32. The receiver of claim 30, wherein the starting entitlement ID is the first entitlement ID in the sequence of entitlement IDs.

33. The receiver of claim 30, wherein the map is represented by an array of elements having entitlement values stored therein, and the index number of the element in the array having the entitlement value for a given instance of service is determined from the sequence of entitlements IDs by the difference between the starting entitlement ID and the entitlement ID for the given instance of service.

34. The receiver of claim 29, wherein the array is a bit map.

35. The receiver of claim 29, wherein the memory is accessible only to an access control component.

36. The receiver of claim 29, wherein the starting entitlement ID and the map are set in response to a message received in the receiver.

37. A method of determining entitlements for instances of service in a receiver, the method comprising the steps, in the receiver, of:

receiving at least a first message having a starting entitlement ID and a map having entitlement values that represent entitlements of the receiver for instances of service;

storing in a memory at least the starting entitlement ID and the map of the first message;

receiving at least a second message having an entitlement ID associated with a given instance of service; and

determining whether the receiver is entitled to the instance of service by using the starting entitlement ID and the entitlement ID associated with the given instance of service to determine an element of the map which has the entitlement value of the given instance of service.

38. The method of claim 37, wherein the map is stored as an array, the starting entitlement ID is the first entitlement ID in a sequence of entitlement IDs including the entitlement ID associated with the given instance of service, and the difference in the sequence between the starting entitlement ID and the entitlement ID associated with the given instance of service is used to determine an element in the array having the entitlement value for the given instance of service.

39. The method of claim 38, wherein the map is a bit map.

40. The method of claim 37, further including:

receiving at least a second message that specifies a given entitlement agent; and

allocating a portion of the memory to the given entitlement agent.

41. The method of claim 40, further comprising:

receiving at least a third message having a starting entitlement ID and a map;

storing the starting entitlement ID and the map of the at least third message in the portion of the memory allocated to the given entitlement agent.

42. The method of claim 37, wherein the first message further includes a time indicator representing expiration date of the entitlements and the storing step further includes storing the expiration date; and wherein the determining step further includes:

determining whether the entitlement value for the given instance of service has expired.

43. The method of claim 37, further comprising the steps of:

receiving a third message having a long-term key;

processing in a secure element the long-term key to obtain a short-term key; and

decrypting the given instance of service with the short-term key.

44. The method of claim 38, further comprising the step of:

authenticating the first message using information provided by an entitlement agent.

45. The method of claim 44, wherein the step of authentication is performed by using RSA digital signatures.